Abstract

Embodiments of the invention facilitate providing wireless links with longer link ranges and/or better suppression of interference than can be provided by the integrated antennas of a typical wireless network node. While, in some cases, it is possible to install intermediate wireless network nodes to hop through long expanses between distant wireless network nodes, it is desirable for distantly spaced wireless network nodes to reach one another through a single transit link (i.e. one hop). This approach is preferable because a single transit link is capable of higher data rates and better interference suppression than multi-hop transit links. The present invention provides methods and apparatus for enhancing the link range achievable by typical wireless network nodes so that distantly spaced wireless network nodes are able to communicate with one another using only a single transit link.